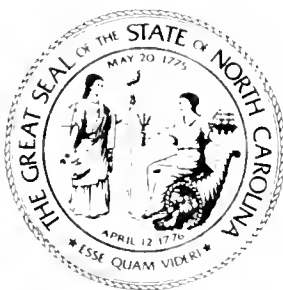


# **LEGISLATIVE RESEARCH COMMISSION**

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## **AIR AMBULANCE SERVICE**



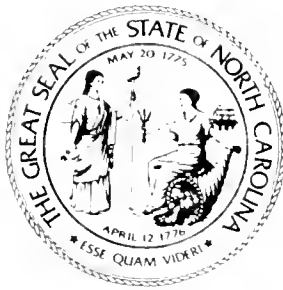
**REPORT TO THE  
1985 GENERAL ASSEMBLY  
OF NORTH CAROLINA**



# **LEGISLATIVE RESEARCH COMMISSION**

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## **AIR AMBULANCE SERVICE**



**REPORT TO THE  
1985 GENERAL ASSEMBLY  
OF NORTH CAROLINA**

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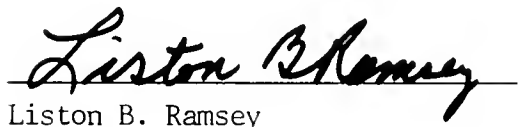
December 13, 1984

TO THE MEMBERS OF THE 1985 GENERAL ASSEMBLY:

The Legislative Research Commission herewith reports to the 1985 General Assembly on the matter of an air ambulance service. This report is made pursuant to G.S. §120-30.17.

This report was prepared by the Legislative Research Commission's Committee on Air Ambulance Service and is transmitted by the Legislative Research Commission for your consideration.

Respectfully submitted,

  
Liston B. Ramsey

  
W. Craig Lawing

Cochairmen

Legislative Research Commission



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I N T R O D U C T I O N



## INTRODUCTION

Pursuant to North Carolina General Statute §120-30.17(1), the Legislative Research Commission authorized an air ambulance committee to study the feasibility of and make recommendations for an air ambulance system in North Carolina. The committee was chaired by Senator Aaron Plyler and Representative Joe Hackney.

Interest in a statewide air ambulance system first arose in the early 1970's. In 1973, the General Assembly enacted the Emergency Medical Services Act, which authorized the Secretary of the Department of Human Resources to "promote the development of an air ambulance support system to supplement ground vehicle operations" (N.C.G.S. §143-509(8)). In the following years, the Department's Office of Emergency Medical Services produced a draft paper on air ambulances and financed both a study of a fixed-wing air ambulance system and a demonstration air ambulance project using a helicopter. None of these efforts materialized into a statewide air ambulance system.

However, interest in the proposal was renewed in 1983, particularly among the larger hospitals. In February, 1984, Dr. Sarah T. Morrow, Secretary of the Department of Human Resources, appointed a Task Force to study the feasibility of a statewide air ambulance system and to consider the degree of involvement the State should have in that system.

In September, 1984, the Task Force issued its report, recommending that the State purchase 9 helicopters for 6 sites throughout the state. One primary helicopter was to be stationed at each site and one back-up

helicopter was to be provided per every two sites. The report of the Task Force further recommended that the helicopters be shared with the Department of Crime Control and Public Safety for law enforcement use. The Highway Patrol would be responsible for the day-to-day operation and flight of the helicopters, but medical use would have priority over patrol use.

Several physicians staffing the Task Force objected to the report on the grounds that a joint EMS-law enforcement service was not viable: law enforcement officials, even with extensive paramedic training, could not provide the degree of medical skill required to transport and stabilize trauma victims. The physicians also noted that the helicopters would have a much slower response time if they were being used by law enforcement officials in another part of the state at the time an emergency call was received.

Consequently, the Task Force revised its report to recommend the establishment of an EMS-managed air ambulance service. This report was presented to the Air Ambulance Committee on October 19, 1984, by Dr. Morrow and Mr. Tom Harmelink of the Office of Emergency Medical Services.

C O M M I T T E E   P R O C E E D I N G S



## COMMITTEE PROCEEDINGS

This report is issued as the result of a meeting of the full committee on October 19, 1984, a meeting of the subcommittee on November 2, 1984, a telephone conference between the subcommittee members and the staff on November 8, 1984 and a final committee meeting on November 26, 1984.

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### October 19, 1984 meeting

After opening remarks by the cochairmen, Representative Joe Hackney introduced Dr. Sarah T. Morrow, Secretary of the Department of Human Resources. Dr. Morrow spoke briefly about the background of and impetus for the Air Ambulance Task Force. The Task Force was appointed in February, 1984 to study the feasibility of an air ambulance service financed and coordinated by the state. (The membership list of the Task Force appears near the end of Exhibit 1).

Mr. Tom Harmelink, Chief of the Office of Emergency Medical Services, explained the Task Force's proposal in detail. (See Exhibit 1.). The Task Force recommended that the state purchase six helicopters and station one at each of the following sites: Asheville, Charlotte, Greenville, the Triangle, Wilmington and Winston-Salem. The helicopters would be based at a designated trauma/medical center at each site. Since each helicopter could effectively fly a 100 mile radius from its base (Exhibit 2), every North Carolina county would be covered by the air ambulance service.

The cost of implementing all six sites in Fiscal Year 1986 would be approximately 16 million dollars (Exhibit 1, p. 23). This cost estimate includes the purchase of three back-up helicopters to be used whenever a primary helicopter is down. The cost of operating all six sites is estimated to be between 4 and 5 million dollars annually. Alternatively, the Task Force proposed that the sites be phased in over a period of four years at a cost of approximately 7.2 million dollars the first year for sites in Greenville, the Triangle and the west. The three remaining sites would be implemented during the next three years at costs varying from 5 to nearly 8 million dollars per year. (See Exhibit 1, p. 24.)

Mr. Heman Clark, Secretary of Crime Control and Public Safety, spoke on behalf of a joint hospital-law enforcement service whereby the Highway Patrol would provide the pilots, communication network and day-to-day operation of the helicopters. Medical use of the helicopter, however, would have priority over law enforcement use. Secretary Clark distributed several handouts summarizing joint air ambulance services in other states. (See Exhibits 3, 4 and 5.)

Committee member Dr. Herbert Proctor noted that each helicopter would probably be required for medical use at least once a day, thereby diminishing any effective use for law enforcement purposes.

Dr. Proctor then addressed the committee concerning the Military Assistance to Safety and Traffic program. This program, more popularly known as MAST, is operated by the United States Army on a purely voluntary basis. MAST normally operates within a 100 mile radius of Fort Bragg but will fly to any point in the state under certain conditions. Dr. Proctor noted that MAST does not presently meet the needs of the



citizens of North Carolina in providing an air ambulance system and that it would discontinue its service once a competing service becomes operational in North Carolina. Mr. Duncan Yaggy, Director and Chief of Planning at Duke University Medical Center, added that the United States Army was eager to reduce the MAST program.

Several hospital administrators also spoke to the committee. Mr. Eric Munson, a committee member and Executive Director of North Carolina Memorial Hospital in Chapel Hill, stated that NCMH favored the statewide air ambulance proposal of the Task Force but would submit a certificate of need for its own air ambulance service if no committee recommendation of a statewide system was forthcoming. Mr. Richard Heriot, Vice-President of Patient Care Services at North Carolina Baptist Hospitals in Winston-Salem, added that his hospital also favored the Task Force proposal.

Mr. Yaggy and Mr. Fred Brown, Jr., Vice-President of Pitt County Memorial Hospital, stated that their respective institutions had applied for certificates of need to lease their own air ambulances. Mr. Yaggy added that Duke would be willing to participate in any statewide system as long as it retained medical and staff control of its own air ambulance; however, Duke would not await this committee's recommendations before initiating its own service. When questioned on his hospital's refusal to await the committee report, Mr. Yaggy responded that the state and the hospitals had been looking at this issue for nearly 12 years and no action has yet been taken. He added that Duke was presently prepared to go forward with its plans and that it would be unreasonable to await the General Assembly's decision next year (1985), particularly since implementation of the program would not begin until 1986. Mr. Yaggy's comments are outlined in a written summary appearing in the appendix (Exhibit 10).

Mr. Brown stated that Pitt Memorial was willing to await this committee's final report before implementing the service it has been considering. The four hospitals represented by these administrators are all under consideration as statewide sites under the Task Force proposal.

The cochairmen then appointed themselves, Mr. James Hackney, Jr., and Mr. Eric Munson to a subcommittee to further study the Task Force proposal and make its own recommendations.

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November 2, 1984 meeting

Following Senator Plyler's call to order, Mr. Jim Johnson, senior analyst for Fiscal Research, proposed three alternative arrangements for an air ambulance service in North Carolina:

- (1) The State should follow the Task Force proposal
- (2) The State should step aside while interested hospitals lease and operate their own services with their own funds
- (3) The hospitals should lease their own services, but the state should offer some financial incentive to encourage state coordination of all the individual services

The proposals were discussed as follows by members of the committee and several persons in attendance at the meeting:

Proposal 1: Mr. Munson and Mr. Harmelink both stated that they favored the Task Force proposal. Mr. Harmelink noted that Proposal 3 would be difficult since the State would have trouble monitoring and enforcing coordination agreements with the various hospitals. Mr. Munson suggested

that Duke and NCMH could agree to jointly staff and operate an air ambulance service in the Triangle area, with the helicopter(s) located either at RDU Airport or at each hospital on an alternating weekly basis. Mr. Yaggy stated that Duke would locate its helicopter at its own helipad rather than at RDU. A letter from Dr. Proctor (Exhibit 6) to the subcommittee was also introduced.

Proposal 2: Representative Hackney stated that some type of state coordination of air ambulance services would be desirable. Mr. Harmelink noted that a group of private physicians in the Charlotte area is considering implementing its own air ambulance service. He added that the recent interest in these services, with plans already underway in Durham, Greenville and Charlotte, could lead to as many as four or five different air ambulance services in the state by the end of 1985.

Proposal 3: Mr. Munson and Mr. Harmelink agreed that the State would have much less control over the hospitals under Proposal 3 than under Proposal 1. Senator Plyler inquired of the hospital administrators present how they felt about being reimbursed by the State for expenses incurred in transporting indigents on hospital-owned air ambulances. All the administrators responded favorably to Senator Plyler's proposal.

Senator Plyler and Representative Hackney instructed the staff to prepare alternatives to the Task Force proposal for the subcommittee's consideration. A telephone conference between the staff and the subcommittee was scheduled for November 8, 1984 to consider the alternatives.

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November 8, 1984 conference call

The subcommittee spoke with the staff via a conference call on November 8, 1984. Mr. Munson outlined a new proposal for the implementation of a statewide air ambulance system. Mr. Munson proposed that the state, through the Office of Emergency Medical Services, lease 3 helicopters initially to be placed at sites selected by either the Office of Emergency Medical Services, the Medical Care Commission or a comparable institution. The Office of Emergency Medical Services would provide the coordination of the three initial sites and would monitor each hospital's compliance with a contract to be entered into between the state and the hospital. The hospital would provide the medical personnel to staff the helicopter. The leasing service, selected by competitive bidding, would provide the helicopters and the pilots. As a result, the state would not be required to operate an air ambulance system as was proposed under the Task Force proposal. Its function would be limited to coordinating and financing the service. If the three initial sites were successful, additional air ambulances would be placed at other sites in the state; if not, the lease could be terminated.

Mr. Jim Hackney suggested that the Highway Patrol be allowed to use the helicopters for emergencies such as hurricanes and searches for fugitives but only in the event that they were not presently being used for medical purposes. He also suggested that the state purchase additional helicopters specifically for use by the Highway Patrol; these helicopters would be dedicated to law enforcement priorities but would

serve as backups to the three helicopters purchased or leased for the hospitals' use.

Mr. Munson and Mr. Hackney agreed to reconcile their proposals as follows: the State would lease 3 helicopters as proposed by Mr. Munson, but those helicopters, if not in use for medical purposes, could be used by the Highway Patrol for extreme emergencies. Mr. Munson added that such use by the Highway Patrol would be very rare. Representative Hackney expressed some doubt about the Highway Patrol's need for helicopters at this time. Senator Plyler noted that the Department of Crime Control and Public Safety intended to request their own helicopters without regard to the actions of the Air Ambulance Committee. The subcommittee thus added to its proposal the following: should the Highway Patrol receive helicopters for its own use, the Department of Crime Control and Public Safety should be directed to coordinate the use of its helicopters with the Office of Emergency Medical Services to possibly serve as back-up units to the hospital-based air ambulances.

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November 26, 1984 meeting

The final meeting of the Air Ambulance Committee was held November 26, 1984. Following discussion by the committee members, a motion was introduced to recommend adoption of the report and proposed bill. A substitute motion to adopt the report without the bill, introduced by

Representative Daniel DeVane, failed. The motion to recommend the report and bill to the General Assembly passed, with Senator Elton Edwards and Representative Daniel DeVane dissenting. A copy of the committee minutes is on file.

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F I N D I N G S





### FINDINGS

1. There is a present need for some type of air ambulance service in North Carolina. The Task Force conservatively estimates that 2,500 critically ill and injured patients would annually benefit from the use of this service. Other estimates range as high as 3,465 patients per year who would use the service. Distribution of the patient load to 3 helicopters yields an average of 2 to 3 flights per helicopter per day.
2. State coordination and/or regulation of the various air ambulance services would benefit the public. The Office of Emergency Medical Services in the Department of Human Resources and the Medical Care Commission are capable of coordinating and regulating a statewide air ambulance system.
3. The State should provide financial assistance to implement the air ambulance system in North Carolina. The enormous expenses incurred in implementing and operating an air ambulance prohibit most medical institutions from initiating such a service. An air ambulance service financed by the State would avoid such prohibitive costs and would assure public access to the service, unlike privately-operated air ambulance services.
4. Should the General Assembly find a present need for the purchase or leasing of helicopters for law enforcement use, those helicopters should be coordinated with the helicopters purchased or leased for medical purposes. This committee has made no study of nor any

recommendations concerning the Department of Crime Control and Public Safety's need for helicopters for law enforcement use.

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R E C O M M E N D A T I O N S



RECOMMENDATIONS

The Legislative Research Commission's Study Committee on Air Ambulance Service in North Carolina recommends the following:

- (1) That the State of North Carolina enter into an arrangement with a provider of helicopter emergency medical services whereby the provider will lease to the State a sufficient number of helicopters and pilots, including back-ups, to transport critically ill and injured patients to those medical centers selected under 2(c) and 3(a) below.
- (2) That the Department of Human Resources, through the Office of Emergency Medical Services, be empowered to.....
  - a) contract with a provider for an air ambulance service
  - b) coordinate and monitor all air ambulance services operating under the State's lease
  - c) enter into contracts with certain medical/trauma centers under which the centers will provide properly trained medical personnel to staff each helicopter in accordance with guidelines to be established by the Office of Emergency Medical Services
- (3) That the Medical Care Commission be empowered to.....
  - a) develop guidelines as to the location of each air ambulance and to designate, under such guidelines, the location of each air ambulance

- b) designate the primary service area of each air ambulance
  - c) make all other rules and regulations necessary to operate the air ambulance program
- (4) That any helicopters operated by the Department of Crime Control and Public Safety be coordinated with the helicopters leased by the Department of Human Resources to serve as back-up units in the event that the provider is unable to timely launch his own back-up helicopter.
- (5) That the Department of Human Resources, through the Office of Emergency Medical Services, coordinate the state air ambulance system with existing and future privately-financed air ambulance systems.
-

R E C O M M E N D E D   L E G I S L A T I O N







1                   (2) determination of each air ambulance site.

2       The Commission shall initially designate at least three  
3       sites, each to become operational within six months of the  
4       date that the first site becomes operational. The  
5       designated sites shall be geographically dispersed to  
6       provide maximum geographical coverage to all areas of the  
7       state.

8                   Sec. 3. This act does not require a hospital to  
9       serve as an air ambulance site, subject to the exception set  
10      forth in Section 4.

11                  Sec. 4. Any hospital operating a privately owned  
12      or leased air ambulance shall coordinate its activities with  
13      the statewide air ambulance system established by this act.

14                  Sec. 5. This act shall become effective July 1,  
15      1985.

C O M M E N T A R Y O N T H E  
P R O P O S E D L E G I S L A T I O N



COMMENTARY ON BILL

SECTION 1: G.S. 143-508 et seq. is the Emergency Medical Services Act of 1973. The Act gives the Department of Human Resources (DHR) the power to establish and maintain programs to improve and upgrade emergency medical services in North Carolina. The committee's bill would add a new section, 508.1, that would specifically require DHR to develop a statewide air ambulance system. DHR would be responsible for leasing an air ambulance service for each of the participating hospitals. It would also enter into contracts on behalf of the state with participating hospitals. The terms of the hospital contracts would be governed by rules promulgated by the Medical Care Commission.

This bill would also exempt DHR and the participating hospitals from applying for a certificate of need (Article 9, Chapter 131E of the General Statutes) to operate an air ambulance. Consequently, the state could place its helicopters where it felt they were needed, subject only to the provision in Section 2 that the ambulances be geographically dispersed. If the state air ambulance program is not exempted from the certificate of need law, DHR may run into difficulty in trying to place a state helicopter in an area already covered or approved for coverage by a privately-operated air ambulance.

SECTION 2: The Medical Care Commission is a 17 member state agency that has been incorporated into the Department of Human Resources. Its membership is a cross-sectional representation of the medical society; a few non-medical members are also on the committee.

The Medical Care Commission is perhaps the most appropriate agency to regulate the air ambulance program since it represents a broad range of medical and non-medical opinion and has the background necessary to draft regulations affecting hospitals and medical care. In addition, the Commission already regulates ground ambulances and EMS personnel. The Office of Emergency Medical Services serves as staff to the Commission and is very familiar with air ambulance program requirements.

The bill specifically empowers the Commission to both regulate and determine the number and location of air ambulance sites, as long as it initially selects 3 sites whose service areas can provide maximum geographical coverage. In order to insure the development of a statewide system, rather than a regional system, a provision was put in the bill to require nearly simultaneous implementation of the first three sites. For example, if a site in Greenville began operating June 1, 1986, the next two sites must be operating within six months of that time (i.e., by December 1, 1986). Note, however, that this provision does not establish a date by which the first site must be operational.

SECTION 4: The language "coordinate its activities" can be construed to mean almost anything and may alarm those hospitals planning to operate their own air ambulance services. This provision was prompted by the following: in its approval of Duke's and Pitt's certificate of need applications for air ambulances, the Department of Human Resources imposed the condition that each hospital participate in any statewide system that might eventually be developed. No one is quite sure what was meant by

the word "participate," but it was felt this language was too strong. Thus, the word "coordinate" was substituted in this bill.

It may be possible to accomplish the same result by eliminating this provision altogether and relying solely on the certificate of need process. All certificate of need applications approved thus far (Duke and Pitt) have been conditioned upon participation in the statewide system. Future applications could be likewise conditioned, or they could be denied in instances where a state helicopter is already operational within the area proposed to be serviced by a private air ambulance operator. The committee may wish to question Mr. Harmelink (Office of Emergency Medical Services) or Mr. I. O. Wilkerson (Director of Division of Facility Services) on the propriety of this provision and whether the certificate of need laws can be used to achieve the same result.

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A P P E N D I C E S



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REPORT OF THE TASK FORCE ON  
AIR AMBULANCE SERVICES IN NORTH CAROLINA

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